

Appln. Serial No. 10/701,325

Reply to Office Action Mailed June 10, 2005

LISTING OF CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application:

- 1 1. (Original) An apparatus for use in a well having a main bore and a lateral branch, the
2 lateral branch comprising an electrical device, the apparatus comprising:
3 an inductive coupler mechanism to electrically communicate electrical signaling in the
4 main bore with the electrical device in the lateral branch.
- 1 2. (Previously Presented) Apparatus to communicate electrical signaling from a main bore
2 of a well to equipment in a lateral branch, comprising:
3 a connector mechanism adapted to connect equipment in the main bore to equipment in
4 the lateral branch; and
5 a first inductive coupler portion attached to the connector mechanism to communicate
6 electrical signaling with the lateral branch equipment.
- 1 3. (Previously Presented) The apparatus of claim 2, further comprising an electrical cable
2 connected to the first inductive coupler portion.
- 1 4. (Original) The apparatus of claim 3, further comprising a second inductive coupler
2 portion connected to the electrical cable and attached to the connector mechanism, the second
3 inductive coupler portion adapted to communicate signaling with the main bore equipment.
- 1 5. (Original) The apparatus of claim 4, further comprising a third inductive coupler portion
2 that is part of the main bore equipment to inductively couple to the second inductive coupler
3 portion.
- 1 6. (Original) The apparatus of claim 5, further comprising a fourth inductive coupler
2 portion that is part of the lateral branch equipment to inductively couple to the first inductive
3 coupler portion.

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- 1 7. (Original) The apparatus of claim 2, wherein the connector mechanism is further adapted
2 to connect equipment in the main bore to equipment in a second lateral branch, the apparatus
3 further comprising a second inductive coupler portion attached to the connector mechanism to
4 communicate electrical signaling with the second lateral branch equipment.
- 1 8. (Original) A completion string for use in a well having a main bore and a lateral branch,
2 comprising:
3 equipment in the main bore and in the lateral branch;
4 a first inductive coupler assembly proximal the equipment in the main bore;
5 a second inductive coupler assembly proximal the equipment in the lateral branch;
6 and
7 an electrical cable connecting the first and second inductive coupler assemblies.
- 1 9. (Original) The completion string of claim 8, further comprising equipment in a second
2 lateral branch, the completion string further comprising a third inductive coupler assembly
3 proximal the equipment in the lateral branch.
- 1 10. (Original) The completion string of claim 9, further comprising a fourth inductive
2 coupler assembly proximal the main bore equipment and a second electrical cable connecting the
3 third and fourth inductive coupler assemblies.
- 1 11. (Original) The completion string of claim 8, wherein the equipment in the main bore
2 includes a tubing, the completion string further comprising a connector member between the
3 tubing and the lateral branch equipment.
- 1 12. (Original) The completion string of claim 11, wherein the lateral branch equipment
2 comprises an electrical device.
- 1 13. (Original) The completion string of claim 12, wherein the electrical device comprises a
2 monitoring module.

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- 1 14. (Original) The completion string of claim 12, wherein the electrical device comprises a
2 control module.
- 1 15. (Original) The completion string of claim 11, further comprising a casing having a
2 window open to the lateral branch, wherein the connector member extends through the casing
3 window.
- 1 16. (Original) The completion string of claim 11 wherein the first inductive coupler
2 assembly comprises one portion attached to the tubing and another portion attached to the
3 connector member.
- 1 17. (Original) The completion string of claim 16, wherein the second inductive coupler
2 assembly comprises one portion attached to the connector member and another portion attached
3 to the lateral branch equipment.
- 1 18. (Original) The completion string of claim 8, further comprising a hydraulic control line
2 adapted to extend from the main bore to the lateral branch.
- 1 19. (Original) The completion string of claim 18, further comprising a lateral branch
2 connector adapted to connect the main bore equipment to lateral branch equipment, the lateral
3 branch connector comprising a conduit to carry the cable and a conduit to carry the hydraulic
4 control line.
- 1 20. (Original) A method of communicating between main bore equipment and lateral branch
2 equipment in a well, comprising:
3 providing a first inductive coupler assembly electrically connected to the main bore
4 equipment and in communication with the lateral branch equipment; and
5 transmitting electrical signaling over an electrical cable connected to the first inductive
6 coupler assembly.

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- 1 21. (Original) The method of claim 20, further comprising:
2 providing a second inductive coupler assembly electrically connected to the lateral
3 branch equipment; and
4 electrically connecting the second inductive coupler assembly to the first inductive
5 coupler assembly.
- 1 22. (Previously Presented) The apparatus of claim 2, further comprising a tubing having a
2 lower portion, the lower portion of the tubing having a second inductive coupler portion,
3 wherein the connector mechanism has a third inductive coupler portion and a receptacle
4 to receive the lower portion of the tubing to position the second inductive coupler portion next to
5 the third inductive coupler portion.
- 1 23. (Previously Presented) The apparatus of claim 22, further comprising a module to
2 engage an internal profile of the connector mechanism, the module having a fourth inductive
3 coupler portion that is positioned next to the first inductive coupler portion when the module is
4 engaged to the internal profile of the connector mechanism.
- 1 24. (Previously Presented) The apparatus of claim 23, wherein the module comprises one of
2 a sensor module and a control module.
- 1 25. (Previously Presented) The method of claim 21, further comprising:
2 providing a connector to connect the main bore equipment to the lateral branch
3 equipment, wherein the connector has a receptacle to receive the main bore equipment, the
4 connector having a portion of the first inductive coupler assembly.
- 1 26. (Previously Presented) The method of claim 25, wherein the main bore equipment
2 includes a tubing having a lower portion to engage in the receptacle of the connector, the lower
3 portion of the tubing having another portion of the first inductive coupler assembly.

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- 1 27. (Previously Presented) The method of claim 26, further comprising providing a module
- 2 into the connector, the module having a portion of the second inductive coupler assembly, and
- 3 the connector having another portion of the second inductive coupler assembly.